

Statement of Basis
For
EnergySolutions' Surety Review and Approval

On November 30, 2015, EnergySolutions submitted a request to update the financial surety for its Radioactive Materials License (UT230249), 11e.(2) Radioactive Materials License (UT2300478) and the closure/post-closure cost estimate for its state-issued Part B Hazardous Waste Permit (UTD982598898). This request combined the separate financial sureties for each of the three facilities into one comprehensive surety. EnergySolutions stated the following in its November 30, 2015 request: "A combined surety analysis is appropriate because if EnergySolutions goes out of business, all three facilities would require decommissioning concurrently; furthermore, the combined analysis allows for a more holistic approach to the closure of the Clive Facility."

EnergySolutions also submitted the Annual Closure Cost Adjustment for the state-issued Part B Hazardous Waste Permit as a Class 1 Permit Modification Request. This document was submitted on January 11, 2016.

In the past, each facility had its own financial surety. With this submittal, EnergySolutions has combined the three sureties into one, contending there is greater efficiency in completing closure activities.

Previous sureties have primarily been based on calculated quantities or tasks (e.g., yards of soil or debris, placing synthetic liner, etc.) using the RS Means construction cost estimating on-line database. In 2014, the Utah Legislature passed SB 173 which allows a facility to base its surety cost calculations on a competitive bid. It was under this statute that EnergySolutions submitted its request to combine the separate sureties using a bid from ERM-West, Inc.

The Division requested confirmation from the USEPA and the USNRC that a combined surety approach was acceptable. USNRC stated that it was expedient to use the "economies of scale" that a combined surety provides. Both agencies, however, reiterated that the surety must be sufficient to close and monitor all three facilities and that funds designated for one facility could not be used for another. EnergySolutions will fund the closure and post-closure care of the facilities using three separate financial mechanisms in the amounts listed in the table below. Separate funds for each facility will allow the contractor to use the economies of scale to maximize efficiency in closing all three facilities at one time.

The combined surety was reviewed for consistency with USNRC regulations 10 CFR Part 61 Subpart E- Financial Assurance, Utah Administrative Code R313, and R313-264-140 through 151, 40 CFR Part 264, applicable state regulations and current permits and licenses.

EnergySolutions' Utah Clive facility is a dynamic and changing facility. Therefore, the closure and post-closure cost estimates and closure schedules are required to be submitted annually for review. In general, the review looks at changes in each license or permit for the following:

- 1) New facilities constructed since previous review.
- 2) Changes in surety costs versus the current approved surety.
- 3) Quantities of materials needed for closure of the site.
- 4) Quantities of material requiring demolition and disposal.
- 5) Annual RS Means Facilities Construction Cost Data adjustments.
- 6) Inflation or deflation rates.
- 7) Third party estimates versus currently approved surety.
- 8) Regulations and license compliance.
- 9) Changes in regulations.

Material quantities for cell closure and for demolition have been evaluated over the course of many years. All quantities have been confirmed and were not specifically recalculated for the combined surety review.

Associated with the treatment, storage and disposal operations on Section 32 are ancillary support facilities on Sections 5, 29 and 33. Also found on Sections 5 and 29 are borrow pits used to procure native material for cell construction and waste placement. EnergySolutions has proposed to provide surety for these facilities through a Conditional Use Permit (CUP) and a trust agreement with Tooele County. The Division will review the CUP and trust agreement for adequacy once they have been finalized. The proposed surety for these items is \$1,574,758.

For the 11e.(2) landfill, once closure is complete, the closed landfill will be transferred from state to DOE control for the institutional care period.

Due to the change in the methodology of surety calculations, an itemized correlation between the current and the proposed surety amounts is difficult. A simple comparison of the current surety amounts and those proposed under the new calculation method is as follows:

Facility	Current Surety Amount	Proposed Surety Amount
Mixed Waste Part B (w/VTD)*	\$13,991,440	\$17,105,719
LLRW*	\$57,434,132	\$45,403,018
11e.(2)*	\$11,834,233	\$9,970,936
Remaining Perpetual Care Liability	\$7,280,052	\$7,247,924
Unrestricted Areas [#]	\$320,000	\$1,574,758
Overall Total Cost	\$90,859,857	\$81,302,373

*Including post-closure and indirect costs

[#]Will be included in the bond with Tooele County.

The **\$9,557,484** decrease in surety is caused by the elimination of areas that have been double counted in the current calculation and the savings gained by combining closure efforts across all three facilities.

Based on a thorough review of the facility submittals, contractor submittals, applicable rules, and technical knowledge, the Director of the Division of Waste Management and Radiation Control proposes to approve the combined financial surety for the Energy*Solutions* LLC, Clive Facilities in the amount of \$81,302,373.